

REMARKS

Claims 21-39 remain pending in this application. Claims 21, 35 and 36 were amended in this response. No new matter has been introduced as a result of the amendments. Support for the amendments may be found, for example, in FIGs. 1-2, and supporting text.

Claim 35 was rejected under 35 U.S.C. §112, second paragraph as allegedly being indefinite for failing to point out and distinctly claim the subject matter which Applicant regards as the invention. In light of the present amendments to claim 35, Applicant submits the objectionable matter has been addressed. Withdrawal of the rejection is earnestly requested.

Claims 21, 23-24, 26 and 28-30 were rejected under 35 U.S.C. §103(a) as being unpatentable over Thorton (US Patent 5,917,906) in view of Boedecker (US Patent 5,747,756) and Kfoury et al. (US Pub. 2003/0044000).

Claim 22 was rejected under 35 U.S.C. §103(a) as being unpatentable over Thorton (US Patent 5,917,906) in view of Boedecker (US Patent 5,747,756) and Kfoury et al. (US Pub. 2003/0044000), and further in view of Aaltonen et al. (US Patent 6,274,825).

Claims 25 and 27 were rejected under 35 U.S.C. §103(a) as being unpatentable over Thorton (US Patent 5,917,906) in view of Boedecker (US Patent 5,747,756) and Kfoury et al. (US Pub. 2003/0044000), and further in view of Jekot et al. (US Patent 4,862,499).

Claim 31 was rejected under 35 U.S.C. §103(a) as being unpatentable over Thorton (US Patent 5,917,906) in view of Boedecker (US Patent 5,747,756) and Kfoury et al. (US Pub. 2003/0044000), and further in view of Domzalski et al. (US Patent 5,898,147).

Claim 32 was rejected under 35 U.S.C. §103(a) as being unpatentable over Thorton (US Patent 5,917,906) in view of Boedecker (US Patent 5,747,756) and Kfoury et al. (US Pub. 2003/0044000), and further in view of Hahm et al. (US Pub. 2001/0003539)

Claim 33 was rejected under 35 U.S.C. §103(a) as being unpatentable over Thorton (US Patent 5,917,906) in view of Boedecker (US Patent 5,747,756) and Kfoury et al. (US Pub. 2003/0044000), and further in view of Anzai (US Patent 6,639,159).

Claim 34 was rejected under 35 U.S.C. §103(a) as being unpatentable over Thorton (US Patent 5,917,906) in view of Boedecker (US Patent 5,747,756) and Kfoury et al. (US Pub. 2003/0044000), and further in view of Park (US Pub. 2002/0032011)

Claim 35 was rejected under 35 U.S.C. §103(a) as being unpatentable over Thorton (US Patent 5,917,906) in view of Boedecker (US Patent 5,747,756) and Kfoury et al. (US Pub. 2003/0044000), and further in view of Pratt et al. (US Pub. 2004/0085,360).

Claim 36 was rejected under 35 U.S.C. §103(a) as being unpatentable over Thorton (US Patent 5,917,906) in view of Inagaki et al. (US Patent 5,613,599).

Claims 37-39 were rejected under 35 U.S.C. §103(a) as being unpatentable over Thorton (US Patent 5,917,906) in view of Inagaki et al. (US Patent 5,613,599) and Boedecker (US Patent 5,747,756).

In light of the present amendments, Applicant traverses these rejections. Regarding independent claim 21, the cited art, alone or in combination, fails to teach or suggest the features of “at least one cap connected to a top surface of the flexible carrier, wherein the cap is movable when force is applied to a surface of the cap; and at least one fixing means, arranged beneath a first plane that includes the at least one cap, and above a second plane of the flexible carrier connected to the cap, wherein the at least one cap, and the flexible carrier, is configured in such a way that force can be transmitted in a substantially punctual manner through a plane that includes the fixing means and wherein the fixing means, in one area of at least one terminal edge, secures the input device in or on a housing.”

Regarding, Thorton, the document discloses a poly dome sheet (FIG. 1, ref. 31), where individual domes (30) are *integrated within the sheet itself* (see FIG. 1). A spacer sheet (40) is disclosed, that is laid over the *top* surface of the poly dome sheet (FIGs. 1, 3), and a entry pad (50) is laid over the spacer sheet (40) (col. 4, lines 17-42). Applicant submits that the domes (30) are not “connected to a top surface of the flexible carrier,” as they are shown as being part of the flexible carrier itself.

More importantly, the arrangement of the integrated domes in Thorton teaches away from the presently claimed arrangement. Amended claim 21 discloses that the fixing means is “arranged beneath a first plane that includes the at least one cap, and above a second plane of the flexible carrier connected to the cap” (for an illustration of this arrangement, see FIG. 1 of the present application). Thorton clearly discloses that the spacer sheet (40) is above the domes (30) on the poly dome sheet (50) “so as to minimize any undue pressure on the touch pad surface 21” (col. 4, lines 55-56). Additionally, since the domes are integrated into the poly-dome sheet, it

would be impossible to have the fixing means arranged “beneath” the cap, and “above” the flexible carrier at the same time. Moreover, Thorton teaches away from a configuration where “the fixing means, in one area of at least one terminal edge, secures the input device in or on a housing.” In this regard, Thorton clearly shows that the end (58) of entry pad (50) secures the touch pad assembly (75) in the housing (15) (see FIGs. 1 and 2). Boedecker, Kfoury, Aaltonen, Jekot, Domzalski, Hahm, Anzai, Park, and Pratt fail to solve the deficiencies of Thorton, and there is no apparent reason why one having ordinary skill and creativity in the art would combine the references in the manner suggested in the Office Action.

Regarding independent claim 31, Thorton does not disclose, and teaches away from a configuration including the steps of “producing a flexible carrier and at least one cap for key entry on the input device, wherein the flexible carrier comprises at least one projection that is at least partially guided through a recess of a mechanically stable fixing means and extended to the cap as the result of a thermoplastic shaping or reshaping process; and molding the cap on the flexible carrier after the fixing means and the flexible carrier have been assembled.” As discussed above, Thorton’s domes are integrated into the flexible carrier, since the carrier merely provides tactile feedback for a touch pad surface (21). Moreover, the arrangement in Thorton clearly does not disclose that the cap is molded on the fixable carrier after the fixing means and the flexible carrier have been assembled.

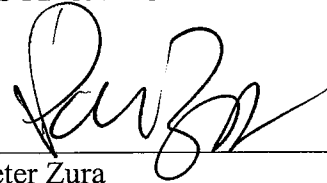
Inagaki fails to solve the deficiencies of Thorton, described above. While Inagaki discloses molded key-top sheet (col. 4, lines 44-46), Inagaki does not teach “at least one projection that is at least partially guided through a recess of a mechanically stable fixing means and extended to the cap as the result of a thermoplastic shaping or reshaping process.” Instead, Inagaki discloses a switch substrate (60), that has two offsets (40) that are adhesively attached to the substrate (60), and the keytop sheet (10) is placed on *top* of the offsets (col. 5, lines 36-63). Assuming that the offsets (40) are being interpreted as “fixing means”, there is no recess through which projections can extend to a cap. Moreover, there is no reason why one having ordinary skill and creativity in the art would combine Thorton and Inagaki in the manner suggested in the Office Action. By placing a molded cap in the configuration of Thorton, the whole premise of having an effective touch-pad assembly with tactile feedback would be negated (col. 2, line 64 - col. 3, line 7). Additionally, the configuration in Inagaki would run counter to the teaching in

Thorton, which expressly recites that an object of the invention is to provide a touch-pad input and a tactile feature “which does not require removal or replacement of a keypad assembly” (col. 1, lines 48-58).

For at least these reasons, the Applicants submit that the rejections under 35 U.S.C. §103 are overcome and should be withdrawn. An early Notice of Allowance is earnestly requested. If any fees are due in connection with this application as a whole, the Examiner is authorized to deduct such fees from deposit account no. 02-1818. If such a deduction is made, please indicate the attorney docket number (117393-022) on the account statement.

Respectfully submitted,
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